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Item 7 (d) of the Provisional Agenda

Establishment of the
Regional Water Resources Council

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I. ESTABLISHMENT OF A REGIONAL WATER RESOURCES COUNCIL

1. Background:

The establishment of a Regional Water Resources Council dates back to the Regional Preparatory Meeting (Baghdad, Iraq 11-16 December 1976) for the United Nations Water Conference held in Mar del Plata, Argentina 14-25 March 1977.

In order to promote regional co-operation among ECWA member States, the Baghdad Meeting adopted, among other things, the following recommendation :

"That there be formed a Water Resources Council for Western Asia (herein after referred to as the Council) composed of one representative from each of the following twelve nations: Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, People's Democratic Republic of Yemen, Qatar, Saudi Arabia, Syria, United Arab Emirates and the Yemen Arab Republic; that each representative on the Council be qualified to speak for his country on water-related matters; that such representative be named as soon as possible in order that an initial meeting be held soon thereafter, that in order to implement the programme of the Council certain committees, task forces and boards, for example, as noted below may need to be established on a permanent or temporary basis, that such committees, task forces and boards maintain full-co-operation with United Nations agencies and governmental and private agencies now working in water programmes; that task forces be phased out after completion of mission; that task forces, boards and committees be established initially for the following areas, with others to be formed as needed".

1.1 Recommended Constituting Bodies of the Council:

A. Board for Water Resources Fund:

This Board is for the purpose of establishing a new fund or to establish access to existing funds to be used in the form of loans or grants to the member nations of ECWA, at the national, regional and subregional (more than one country) levels in water-related programmes.

B. Task force for Establishment of the Water Resources Technical Training Centre

This task force could establish as soon as possible a training centre (for training of technical personnel urgently needed in the field of water resources).

C. Task Force on Data Collection Networks

This task force should be responsible for determining the components and for implementing an adequate data collection network for each country desiring assistance to analyze and assess the situation, recommend components of the system and recommend necessary action to see that the programme is carried out.

D. Committee for Professional Assistance

This committee could seek teams of consultants or specialists of professional stature be made available to any nation requesting assistance in water-related matters.

E. Committee for Applied Research

This committee could examine research facilities presently available for water-related matters and could recommend the establishment of other facilities as deemed necessary to fully cover the needs of all twelve nations of the council.

F. Committee on Subregional Streams and Underground Aquifers

This committee could assist in initiating studies related to streams, wadis or underground aquifers common to two or more of the council nations.

G. Committee for Environmental and Health Aspects of Water Resources Development

The committee is not intended to duplicate existing programmes in health related fields but is intended to ensure that water resources development is done in harmony with environmental and health factors.

H. Committee on Higher Education at Professional Level in Water-Related Fields

This committee would examine the facilities and curriculum of existing higher education institutions in Western Asia with the view toward determining the adequacy of present quality and coverage of courses relating to water resources and environmental fields at professional levels. ^{1/}

2. Related Resolutions and Recommendations

The recommendation concerning the Establishment of a Regional Water Resources Council was later endorsed as a specific regional recommendation by the United Nations Water Conference in Mar del Plata in March 1977. Resolution VIII of the Conference appearing in Annex II, requests the regional commissions to play a central role in the promotion of intergovernmental co-operation in the field of water resources development.

^{1/} For further details on the above-mentioned committees and task force see Annex (1).

As a follow-up to the United Nations Water Conference resolution, the Economic and Social Council of the United Nations (ECOSOC) in its resolutions 2115 (LXIII) and 2121 (LXIII), in Geneva, called upon the regional commissions to expand their activities in the water sector and assign specific responsibilities for an intergovernmental committee. The two resolutions are presented in Annex III.

In an earlier action, ECWA, at its fourth session held in Amman, Jordan, in April 1977, in resolution 39 (IV), requested the Executive Secretary of ECWA to take the initiative in contacting all member States in order to ascertain which of them was in favour of the proposed council and to convene its first meeting as soon as possible. The commission also called upon the secretariat of ECWA to serve as secretariat of the Council and at the expense of the member countries of the Council, in the event of its establishment. 1/

3. Action Taken by ECWA:

In a Note Verbale, 15 May 1977, the ECWA Secretariat contacted member countries of ECWA concerning the Establishment of a Regional Water Resources Council. Of those countries responding, four supported the proposal in writing: Iraq, Bahrain, Oman, Jordan, and one, Lebanon, expressed such support orally. Qatar indicated that further discussion should be held, and Saudi Arabia pointed out that the proposed Council would be duplicating the work of other organizations. Five countries: Kuwait, Syria, Yemen Arab Republic, Democratic Yemen and the United Arab Emirates did not respond.

In the Second Regional Water Meeting held between 30 December 1978 and 3 January 1979 in Riyadh, Saudi Arabia, the delegations discussed the establishment of a Regional Water Resources Council which was agenda item 4.2. Some delegations supported the proposed Council and stressed that there is a need for such a Council, others felt that the Establishment of the Council as proposed might result in an unnecessary duplication of efforts with other existing subregional and regional organizations.

1/ The full text of resolution 39(IV) is attached in Annex IV.

After considerable deliberations at the plenary meeting and also at a closed meeting of the heads of delegations, the meeting decided that the question of the Establishment of the Council required further study and adopted a resolution whose operating paragraphs were:

1. Decides that an ad hoc Intergovernmental Committee from among representatives of countries present at this meeting be created, with ECWA working as its secretariat for the purpose of studying the possibility of establishing a Regional Water Resources Council, if the Committee should through its work find that such a Council would not duplicate the activities of existing organizations in the region in this field,
2. Further decides that the Committee shall be composed of representatives from five countries namely: Jordan, Lebanon, Saudi Arabia, Syria and the United Arab Emirates, and shall carry out the above recommendations and prepare a report which shall be presented to a special meeting to be convened within a maximum of one year, to which all member States of ECWA shall be invited,
3. Requests the Executive Secretary of ECWA to provide the necessary secretariat support services to the committee within its available resources".^{1/}

3.1 First Meeting of the Ad Hoc Intergovernmental Committee

This ad hoc Intergovernmental Committee held its first meeting in Riyadh on 2 January 1979. The meeting was attended by representatives from: Jordan, Lebanon, Saudi Arabia, Syria, United Arab Emirates and ECWA. It discussed the procedures that will be followed by the Committee to accomplish the task it was entrusted with and decided:

(a) To ask ECWA to obtain relevant documents and information from the following organizations on the basis of which ECWA will prepare a report on this subject.

- (i) Secretariat of the Conference of Arab Ministers of Agriculture for the Gulf countries and Arabian Peninsula.
- (ii) Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD)
- (iii) Arab Organization for Agricultural Development (AOAD)

^{1/} Full text is in Annex V.

- (iv) Arab League Educational, Cultural and Scientific Organization (ALECSO) in as far as its work programme covers activities dealing with the functions of the proposed Regional Water Resources Council.
- (v) United Nations Educational, Scientific and Cultural Organization (UNESCO) in respect of its International Hydrology Programme.
- (vi) Food and Agriculture Organization (FAO) in respect of any programmes it has in the region which dealt with one or more of the functions proposed for the Regional Water Council.
- (vii) Arab Fund for Economic and Social Development (AFESD), in as far as its inter-country programme is concerned.
- (viii) Any existing national training institute or centre in the water field where there are facilities for training non-nationals of the country.

(b) To meet in Danascus in the United Nations Development Programme Office (UNDP) on Wednesday 14 March 1979 for two days provided that the report about the council is ready.

As a follow-up to the decision of the ad hoc Committee, ECWA on 17 January 1979 wrote the following regional organizations asking for any relevant information:

1. Arab Organization for Agricultural Development (AOAD), Khartoun, Sudan.
2. Arab League Educational, Cultural, and Scientific Organization (ALECSO), Cairo, Egypt.
3. Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD), Danascus, Syria.
4. United Nations Educational, Scientific, and Cultural Organization (UNESCO), Cairo, Egypt.
5. Food and Agriculture Organization (FAO), Cairo, Egypt.
6. Arab Fund for Economic and Social Development (AFESD), Kuwait.
7. Council of Ministers of Agriculture for the Gulf States and the Arabian Peninsula, Riyadh, the Kingdom of Saudi Arabia.

8. H.E. Dr. Abdul Rahman Al Sheikh, Minister of Agriculture and Water, Riyadh, the Kingdom of Saudi Arabia.
9. The Directorate of Meteorology, World Meteorological Organization (WMO), Jeddah, the Kingdom of Saudi Arabia.

In order to give the above-mentioned organizations more time to prepare their answers, ECWA cabled members of the ad hoc Intergovernmental Committee on March 12, 1979 suggesting that the meeting of 14 March 1979 be postponed until such a time when the necessary information becomes available. 1/

3.2 Related Information Received:

The organizations which have conveyed information about their water related activities in the region were as follows:

3.2.1 United Nations Educational Scientific and Cultural Organization (UNESCO)

As per the International Hydrological Programme (IHP) undertaken by UNESCO in the ECWA region, the following activities were pointed out:

(a) Meeting of IHP Committee for the Arab Region

The meeting was scheduled to be held in October 1979 in Tunis and in co-operation with the Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD) and the Arab League Educational, Cultural, and Scientific Organization (ALECSO), dealing with the several activities of national committees and other points of interest to the Arab Region.

(b) Training Course in Water Resources in the Arab States

To be prepared in co-operation with ACSAD, in Arabic language, and for technicians of eastern Arab countries.

(c) Assessment of Water Resources Including Saline Water

A programme of co-operation with ACSAD will be developed in this field so as to assist countries in the assessment of their water resources.

(d) Preparation of the Hydrogeological Map of the Arab States Region

The Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD) is undertaking this project and United Nations Educational, Scientific, and Cultural Organization (UNESCO) will co-operate in this field.

1/ Full text of the cable is in Annex VI.

(e) Preparation of Arabic Version of the International Glossary of Hydrology:

The Arabic version is being prepared by the Arab League Educational, Cultural and Scientific Organization (ALECSO); co-operation of United Nations Educational, Scientific, and Cultural Organization (UNESCO) is foreseen.

(f) Major Regional Aquifers in North East Africa:

A project is proposed for the development of the major Nubian sandstone aquifer which Egypt, Libya, Sudan and Chad are sharing. An expert group meeting in which the four countries, United Nations Educational, Scientific, and Cultural Organization (UNESCO) and United Nations Environmental Programme (UNEP) are represented will be convened to discuss the technical phase of this project.

3.2.2 Arab Organization for Agricultural Development (AOAD):

Two studies in connexion with the development of water resources in Yemen Arab Republic were received. The first study is about Wadi Sihan Water Resources.

It aims at:

- (a) A comprehensive survey of water resources in Wadi Sihan Basin and determining the present agricultural productivity of the region and its prospects.
- (b) Suggesting industrial works that would promote the development of the area in irrigation and in agriculture so as to increase production horizontally by expanding as yet uncultivated areas and vertically by improving areas under present cultivation.
- (c) Determining ways to optimize the domestic and external marketing of local production.

The second study deals with land and water resources in Sada area. It aims at: Evaluating the possibility of developing water resources and agriculture in the area in a scientific way which permits the maximum usage of these resources without any possible depletion and deterioration in the future and which helps in the socio-economic development of the area.

3.2.3 Arab Fund for Economic and Social Development (AFESD)

Their enclosures to us included the following:

- (a) Chart of lending activities of the Fund in the area of water/sewage sector.
- (b) A summary of the study of the Hamad Basin common to Jordan, Syria, Saudi Arabia and Iraq.

(c) Expansion of the Wad el Magboul Institute in Sudan.

Items (a) and (b) are specific projects and can be found in Annex IX. Although Wad el Magboul is also a specific item rather than a general frame of reference, its background and plan of expansion are outlined below.

Background of the Magboul Institute:

The Wad el Magboul Institute, located 15Km outside of Khartoum, was established in 1962 to train drillers and surveyors of the Rural Water Corporation. Later a draftsmanship course was added and students from Africa, Libya, Jordan and the Yemens were admitted on a limited basis. Its graduates are in high demand throughout the area and in the Gulf. Its work in this field has been recognized by a number of international agencies including United Nations Development Programme, (UNDP), World's Health Organization (WHO) and International Bank for Reconstruction and Development (IBRD). The "Water Supply and Sewerage Sector Report for Sudan" which was recently completed by the World Health Organization (WHO) recommends the regionalization of the Institute; the United Nations Development Programme (UNDP) has recommended that it be enlarged to undertake training for other countries in the region.

The performance of the Institute is particularly impressive given the limited budget under which it has operated to date. United Nations Children's Fund (UNICEF) gave a grant of \$223,000 for three years ending 1978-79. The Yugoslav Government gave \$1,150,000 for construction and equipment but this sum is nearly exhausted. The Rural Water Corporation allocates 1 per cent of its budget for the operation of the Institute.

Expansion Project:

The project will entail the enlargement of the Institute to train additional numbers of trainees from the afore-mentioned countries. This will include, inter alia, curriculum design, facilities, dormitories and staffing. In addition, the project is expected to recommend the utilization of existing national training programme which could lead to their being augmented within a subregional programme designed to strengthen the skills under question. It should be mentioned that this institute does not have the breadth of training of the suggested water resources development training centre.

More on the Institute may be found in Annex (X).

3.3.4 The Secretariat of the Conference of Arab Ministers of Agriculture for the Gulf Countries and Arabian Peninsula

The Secretariat's goals and objectives in the field of water resources are:

(a) Offering studies and proposals for centralizing water affairs at the national level so as to bring together all activities related to water resources, storage and use.

(b) Preparing national short and long term water plans covering the formulation of a general water policy of an attendant strategy.

(c) Limiting water wastage in agriculture due to losses in transport and in defective irrigation networks, through the employment of modern methods of water collection and storage and improvement of production and productivity.

(d) Providing hydrological information through the establishment of a programme for covering each country with a network of hydrometeorological stations, gathering this information and analysing it on a continuous basis.

(e) Exchanging information and technical co-operation among the member States of the Secretariat - especially the states with common borders - so as to promote the development and sound management of common water resources.

(f) Establishing a water data bank and using it to begin an inventory of water resources and to make a study of water demand.

(g) Considering the establishment of special, permanent training centre at colleges and institutes or national water development bodies and the organization of manpower training programmes. The full text of the Secretariat's goals are presented in Annex (XI).

It should be pointed out that the Secretariat covers only the Gulf states of the ECWA region, and, therefore, cannot be a substitute for the wider scope our proposal will cover.

3.2.5 Arab Centre for the Study of Arid Zones and Dry Lands (ACSAD)

Their enclosures to us included the following:

(a) Projects of the Department of Water Studies

- Arab Water Resource Map Project
- Hammad Basin Project
- The "Daw" Basin Project
- Project for the Study and Development of Historical Irrigation Works and Water Technologies of the Arabs.

(b) Agreement on the Establishment of the Arab Centre (the part related to the Department of Water Studies). Sections are:

- Surface water, eg: hydrological networks, erection of dikes.
- Groundwater, eg: exploration, drilling and recharge
- Water quality section, eg: pollution control.

Details on items (a) and (b) are presented in Annexes (XII) and (XIII) respectively.

3.3 Second Ad Hoc Intergovernmental Committee Meeting

The ad hoc Intergovernmental Committee held its second meeting in Damascus on 17-18 September 1979. It was attended by representatives of Jordan, Lebanon Saudi Arabia, Syrian Arab Republic, United Arab Emirates and ECWA. The meeting discussed the report E/ECWA/IR/CONF.3/DP.2/Add.1 which was prepared by the ECWA Secretariat and which contained all relevant documents and information about existing Arab regional and subregional organizations that deal with water resources in the region.

Based on information compiled and analysed in the afore-mentioned report and in light of the discussions of the committee, the latter concluded that resemblances in the activities of existing organizations in the water resource field sometimes reached the point of duplication and that the proposed responsibilities of the Council should be amended and limited to the tasks of co-ordinating and complementing the activities of existing regional organizations dealing with water resources in the region. The committee also decided to postpone for later consideration the possibility of expanding the terms of reference of the proposed Council to include activities which are not undertaken by existing organizations. The report, adopted by the ad hoc Intergovernmental Committee, appears in Annex XV of this document.

The Committee decided that the above recommendations should be submitted to the Special Intergovernmental Meeting planned to be held before the end of 1979 as per operative paragraph 2 of the resolution adopted by the ECWA Second Regional Water Meeting held in Riyadh. 1/

The Special Intergovernmental Meeting was not held as scheduled since discussions about the Establishment of a Regional Water Resources Council require direct involvement and possibly decisions by ECWA's session and in order to avoid discussing the same subject in two consecutive meetings, it was deemed more effective to refer the whole question of the Council directly to this Seventh Session of ECWA.

1/ Full text of the resolution is in Annex (V)

II. PROPOSED INSTITUTIONAL ARRANGEMENTS FOR THE PROMOTION OF REGIONAL/SUBREGIONAL CO-OPERATION IN THE FIELD OF WATER RESOURCES DEVELOPMENT

1. Justification:

Regional and subregional co-operation in the field of water resources in other regions has proved to be fruitful for the planning, co-ordination, management and promotion of water projects. Examples of such multilateral co-operations exist in Europe, USA, USSR, Africa and in some parts of the Arab world.

Some of the major surface and groundwater basins in the region extend beyond national boundaries. The present knowledge about national water resources, including shared resources, varies from one country to the other. On the other hand, a lot of investments and efforts can be more effectively undertaken through mutual co-operation for the development of these shared resources. The findings or outcomes of investigations conducted at national levels on the common surface and/or groundwater basins often proved to be incomplete or misleading as a result of unilateral hydrologic and hydrogeologic data used in these studies. Moreover, unilateral development of these resources in one member country may have serious impact on the development of water resources in the neighbouring states.

Furthermore, co-ordination in the application of modern techniques such as remote sensing, desalination, etc... will contribute significantly to the multidisciplinary orientation of shared basin management and provide a basis for integrated surveys of land, surface and groundwater resources.

Hydrologic and hydrogeologic investigations carried out in the region at national level proved the existence of major shared water basins, the development of which may require co-operative efforts at regional and international levels.

In its Third Special Session March 1979, in New York, the Committee on Natural Resources (CNR) in its resolution ^{1/} on Institutional Arrangement for International Co-operation at the Regional Level has urged the regional commissions that have not already done so to take the necessary steps to establish an appropriate intergovernmental mechanism as soon as possible.

^{1/} Full text of resolution appears in Annex(XIV).

In order to promote regional co-operation in the field of water resources, the ECWA secretariat has proposed the Establishment of a Regional Water Resources Council at the First Regional Water Meeting held at Baghdad in December 1977 as mentioned earlier, and the subject was further discussed in the ECWA Second Regional Water Meeting in Riyadh between 28 December 1978 and 3 January 1979. An ad hoc Intergovernmental Committee was subsequently formed and met in Damascus to discuss the possibility of establishing this council as pointed out in the previous section.

In pursuance to the recommendations of this ad hoc Committee Meeting, the ECWA Secretariat is submitting for the consideration of the Seventh ECWA Session the following three alternative proposals for the terms of reference of the Council, the tasks of which will mainly focus on co-ordination and co-operation in water related activities at regional and subregional levels.

2. ALTERNATIVE I :

The Regional Water Resources Council shall not be an executing agency but shall function as a co-ordinating body for water resources matters at regional level. It will be an independent functional body with ECWA serving at its secretariat during the initial take-off stage after which the Council will develop into a fully independent and autonomous intergovernmental mechanism with its own secretariat support.

2.1 Objectives of the Council:

The objectives of the Regional Water Resources Council shall be to:

- Initiate, launch and co-ordinate activities for the implementation of short and long term regional plans for water resources conservation, management and development with a view to ensure the optimum, comprehensive and co-ordinated utilization of the scarce water resources at regional level and bearing in mind the overall regional and subregional socio-economic development plans.

2.2 Functions of the Council:

The main functions of the Council shall be to:

1. Water Resources Planning and Development

- Initiate and co-ordinate applied scientific and technical research themes related to conservation, development and management of water resources.

- Draw up plans for water uses (irrigation, industry, community water supply, fisheries, hydroenergetics and recreation) based on the regional development plans and in consultation with the concerned water bodies of the member states and the UN Specialized Agencies.

- Supervise and follow-up the implementation and execution of regional or subregional water projects, as and when requested.

- Initiate a common framework to guide the water related activities in such a way as to ensure the highest possible level of efficiency for the benefit of all member states.

- Review, improve, update and activate the subregional water plans and projects in light of current investigations and evaluations of the water resources situation in the region. Post-evaluation of water projects may be undertaken by the council in co-ordination with the concerned water bodies of the member countries, as and when requested.

- Co-ordinate, stimulate and monitor water activities and findings experienced by the national water bodies within the member countries, so as to initiate joint plans or subregional water projects and recommend order of priorities.

2. Water Policies, legislations and regulations

- Provide guidance for the initiation and formulation of national water policies and water legislation and regulations pertaining to rational water uses, water abstraction, pollution and pollutants, water metering systems, water pricing, water standards for various uses, and water protection areas. The council should attempt to harmonize national water legislation and regulations within the region as and when requested.

3. Educational and Training Arrangements

- Hold periodic technical seminars' workshops and symposia on water related problems, in co-operation with the member states and other interested Arab and international organizations.

- Initiate in consultation with interested member states for on-the-job training programmes and encourage the regular exchange of skilled manpower and expertise in water related matters within and outside the region.

4. Financial Matters

- The council may, subject to the approval of Member States, arrange for the provision of untied financial aids, loans or grants from donating agencies within or outside the region for the formulation and execution of water projects/programmes for the benefit of the ECWA region.

5. Water Data

- Formulate programmes to establish, modify and/or improve:

a) Hydrologic and hydrogeologic observations network so as to ensure efficient and integrated coverage of the region.

b) Methods, procedures and techniques used in water resources data collection, compilation, processing, analysis, publication, storage and retrieval.

- Activate the establishment of a regional water data bank and documentation centre to facilitate exchange of information on current and planned water related projects within and outside the region.

- Initiate plans to harmonise methodologies and instrumentations used in water data collection and processing in the region.

6. International Agreements

- International, regional or subregional water agreements may be reviewed or implemented through the council but only upon the request of the concerned member states.

7. Emergency Cases

- In case of force majeure or emergency situation, the council may, in co-ordination and consultation with the concerned member countries, recommend certain measures at regional, subregional or even national levels so as to safeguard the water resources.

- In case of conflicting interests, with respect to common or shared water resources, the Council may, upon request, act as a guiding or mediating agency to resolve the conflict and contribute to the optimum development of the shared water resources.

2.3 Organization and Composition of the Council

The Council shall have:

1. A Board of Representatives

The board of representatives will be composed of one representative from each member state of ECWA that decides to become member of the Council. Representatives of member states in the Council should be at a high policy making level and authorized to speak for their countries on water related matters.

The board of representatives is the highest responsible authority in charge of implementing the functions and activities of the Council and of taking appropriate decisions so as to achieve the Council's objectives.

2. A Supporting Technical Staff

The supporting staff will be formed of a team of highly qualified experts specialized in the various aspects of water resources development. The number and fields of specializations of the technical staff will be identified at a later stage taking into consideration the number of the member states of the Council and hence its territorial coverage as well as the nature and scope of the functions and activities to be undertaken by it.

2.4 Other organizational, procedural, administrative and legislative provisions pertaining to the establishment and functioning of the Council will be formulated after the decision to establish this institutional mechanism is adopted by some or all of the member states of ECWA.

3.0 ALTERNATIVE II:

The Regional Water Resources Council shall not be an executing agency but shall function as a co-ordinating body for water resources matters at regional level. It shall be an independent functional body with ECWA serving as its secretariat and shall be composed of a Board of Representatives and a Supporting Technical Staff as described in Alternative I. The main functions of the Council shall be to:

- Initiate, carry out and co-ordinate water related activities to promote co-operation among ECWA member states in the field of water resources conservation, development and management.

- Concentrate its activities on water policy problems, taking into account the economic and technical aspects of these problems and implement these activities in consultation and close co-operation with the national water authorities and concerned international and Arab organizations.

- Assist and facilitate the exchange and dissemination of information and sharing of experiences on the formulation and application of national water policies and the exchange of expertise in this field within and outside the region.

- Promote regional and subregional co-operation in the field of water resources development, particularly for the development of shared water shed areas.

- Perform as a regional focal point in water resources for the co-ordination of water related activities, currently or planned to be undertaken at the national level within the ECWA region.

- Keep an updated register of relevant activities completed or planned by the ECWA member states, UN or Arab regional organizations and international consulting firms operating in the region and to take appropriate steps to harmonise regional efforts and avoid unnecessary duplication in the water resources field.

- Establish focal points within the ECWA member states and convene meetings, seminars, symposia, study tours, expert groups, etc. as deemed necessary in co-operation with these countries for the purpose of studying the concepts and methods required for the analysis of the situation and development of water resources in the region.

- Prepare technical and progress reports on its accomplishments and findings and submit these reports periodically to the ECWA regular sessions and to the meetings of the board of representatives as deemed necessary.

- Study, review and evaluate progress in water resources development in the region.

- Recommend policies, strategies, methods and techniques for the proper investigations, development and utilization of water resources.

- Assess and promote the sharing of experience among member states and between them and other developing regions for the purpose of improving the formulation and implementation of water projects at the national, subregional and regional levels.

4.0 ALTERNATIVE III

The activities of the Regional Water Resources Council shall focus on co-operation and co-ordination in all aspects and reas relating to water resources development in the ECWA region. The Council shall then be viewed as a vehicle for mobilizing regional co-operative efforts in the water resources field. This functional body which may either be independent or attached to ECWA, and composed of representatives of member states, shall perform the following:

- Draw up master plans and joint programmes for the study of sub-regional and/or regional water resources projects for the benefit of the member states of the Council.

- Collate and co-ordinate the activities of the major existing and planned drainage basin bodies (surface and groundwater).

- Compile, classify and disseminate all basic data on the major water sheds and facilitate exchange of information among member states.

- Undertake and promote research programmes as appropriate in relation to the assessment of water resources supplies, their use, development and management.

Annex I

ACTION PROPOSALS
FROM THE FIRST REGIONAL WATER MEETING (BAGHDAD)

December 1976

VII. REGIONAL CO-OPERATION

1. Specific Regional Recommendations for Western Asia

(a) Because of the extreme importance of water resources to the future of Western Asia, it is imperative that measures be taken now to conserve and develop this vital resource in the most efficient and economic manner for the highest and best use of all the nations.

(b) THAT THERE BE FORMED A WATER RESOURCES COUNCIL FOR WESTERN ASIA (HEREINAFTER REFERRED TO AS THE COUNCIL), COMPOSED OF ONE REPRESENTATIVE FROM EACH OF THE FOLLOWING TWELVE NATIONS: BAHRAIN, IRAQ, JORDAN, KUWAIT, LEBANON, OMAN, PEOPLES DEMOCRATIC REPUBLIC OF YEMEN, QATAR, SAUDI ARABIA, SYRIA, UNITED ARAB EMIRATES AND THE YEMEN ARAB REPUBLIC: THAT EACH REPRESENTATIVE ON THE COUNCIL BE QUALIFIED TO SPEAK FOR HIS COUNTRY ON WATER-RELATED MATTERS: THAT SUCH REPRESENTATIVE BE NAMED AS SOON AS POSSIBLE IN ORDER THAT AN INITIAL MEETING BE HELD SOON THEREAFTER: THAT IN ORDER TO IMPLEMENT THE PROGRAMME OF THE COUNCIL CERTAIN COMMITTEES, TASK FORCES AND BOARDS, FOR EXAMPLE, AS NOTED BELOW MAY NEED TO BE ESTABLISHED ON A PERMANENT OR TEMPORARY BASIS: THAT SUCH COMMITTEES, TASK FORCES AND BOARDS MAINTAIN FULL CO-ORDINATION WITH UNITED NATIONS AGENCIES AND GOVERNMENTAL AND PRIVATE AGENCIES NOW WORKING IN WATER PROGRAMMES: THAT TASK FORCES BE PHASED OUT AFTER COMPLETION OF MISSION: THAT TASK FORCES, BOARDS AND COMMITTEES BE ESTABLISHED INITIALLY FOR THE FOLLOWING AREAS, WITH OTHERS TO BE FORMED AS NEEDED:

Note: Format of original document retained.

A. Board for Water Resources Fund

This Board is for the purpose of establishing a new fund or to establish access to existing funds to be used in the form of loans or grants to the member nations of ECWA, at the national, regional and subregional (more than one country) levels in water-related programmes. The Board could establish an appropriate organizational structure to handle such funds. It could also be the responsibility of the Board, with approval of the Council, to disburse aid or to assist nations in securing funds for use in efficient and worthwhile water-related programmes. Such programmes could include, but need not be limited to, the broad categories of education, manpower training, research, consultant services, implementation of data collection systems, water resource development and management and economic analyses of water priorities. Specialists may be employed to determine eligibilities of need for assistance from the fund. Upon acceptance of this concept and formation of the Board, detailed procedures will be developed.

B. Task Force for Establishment of the Water Resources Technical Training Centre

This Task Force could establish as soon as possible a training centre (with location to be determined by the Task Force and Approved by the Council) for training of technical personnel urgently needed in the field of water resources. The initial size of training centre could allow for a minimum of 10 to 15 representatives from each country, with length of training period to be determined after detailed analysis. Training of subprofessional and technical level could be given in many water resource fields, including but not limited to the following:

1. Training in proper techniques of installation of data networks and the evaluation and assessment of such data. The networks would include climatological stations, stream gauging stations, groundwater observations, etc.
2. Fundamentals and principles of hydrology and hydrogeology at subprofessional level.
3. Operation and maintenance of water systems including desalination plants. This would include municipal and rural drinking water systems,

including water treatment plants. It would also include training in laboratory analysis and testing for chemical and biological materials.

4. Training of well drilling crews in proper techniques in drilling and development of well production. Would include electric logging and material analysis and proper selection of pumps, well screens and other pertinent items.

C. Task Force on Data Collection Networks

This Task Force would be responsible for determining the components and for implementing an adequate data collection network for each country desiring assistance to analyse and assess the situation, recommend components of the system and recommend necessary action to see that the programme is carried out.

D. Committee for Professional Assistance

This Committee could see that teams of consultants or specialists of professional stature be made available to any nation requesting assistance in water-related matters. Such matters could include but need not be limited to assistance in developing national water policy, long range planning. Water legislation, rules and regulations for water use, studies and recommendations on governmental infrastructure related to water resources, economic evaluation of priority of water use, assistance in assessing magnitude and quality of surface and groundwater resources, water management techniques and other areas as deemed appropriate, such teams to be paid for by the country requesting assistance or by the Fund as considered appropriate.

E. Committee for Applied Research

This committee could examine research facilities presently available for water-related matters and could recommend the establishment of other facilities as deemed necessary to fully cover the needs of all twelve nations of the Council. The Committee could also establish a centre for compiling and disseminating the findings of research, both regional and international to each of the twelve countries comprising the Council. Research findings

and scientific articles could be published in technical periodicals and professional journals to give prestige to the research programmes of the area. The Committee could also establish and maintain a reference library for use by the Council nations and could establish and operate a data bank including water resource data for the Council nations. The Committee could investigate the need for a trained manpower data bank.

F. Committee on Subregional Streams and Underground Aquifers

This Committee could assist in initiating studies related to streams, wadis or underground aquifers common to two or more of the Council nations. This Committee would co-operate with existing committees and groups concerning the gathering and analysis of basic data and the development of guidelines and compacts governing the use of such resources.

G. Committee for Environmental and Health Aspects of Water Resource Development

The Committee is not intended to duplicate existing programmes in health related fields but is intended to ensure that water resource development is done in harmony with environmental and health factors. Close co-operation could be maintained with health organizations. Consultants or specialists could be employed as required to examine projects proposed for implementation to assess and evaluate the effects, both beneficial and adverse, of such proposed programmes on the environment and health of the country concerned. Special attention could be given to the effects upon coastal and marine water from upstream development. This Committee should investigate the desirability of requiring environmental impact studies for all water resource projects.

H. Committee on Higher Education at Professional Level in Water-Related Fields

This Committee would examine the facilities and curriculum of existing higher educational institutions in Western Asia with the view toward determining the adequacy of present quality and coverages of courses relating to water resources and environmental fields at professional levels. Where deficiencies are noted, action could be taken to bring schooling up to adequate and acceptable levels. Each country would not be expected to provide such training, but somewhere in the region there should be sufficient institutional facilities to fill the needs of the region. This programme could be co-ordinated with existing educational and scholarship programmes within the region.

Annex II

RESOLUTION VIII

INSTITUTIONAL ARRANGEMENTS
FOR INTERNATIONAL CO-OPERATION IN THE WATER SECTOR
U.N. WATER CONFERENCE

March 1977

VIII. Institutional arrangements for international co-operation in the water sector

The United Nations Water Conference

Recognizing the imperative need for accelerated progress in the investigation and development of water resources, and its integrated management for efficient use,

Aware of the efforts being undertaken by the United Nations system at various levels to assist the countries in their endeavours to achieve these objectives.

Recognizing the difficulties in the area of co-ordination which affect the United Nations bodies in execution of their tasks.

Further recognizing the complementary roles of global and regional bodies in the United Nations system, and the role of the regional commissions as outlined in Economic and Social Council-resolution 2043 (LXI) of 5 August 1976.

Deeply conscious of the fundamental importance of water for economic and social development.

Requests the Economic and Social Council, in particular in its consideration of the restructuring of the economic and social sectors of the United Nations system, to give priority consideration to the following recommendations:

(a) That at the intergovernmental level the Economic and Social Council, the Committee on Natural Resources and the regional commissions within their respective regions, should play a central role in the promotion of intergovernmental co-operation as a follow-up to the Plan of Action on integrated water resources development and management recommended by this Conference,

(b) That for this purpose, among other measures, steps be taken to intensify the work in the water sector of the Economic and Social Council and the Committee on Natural Resources through, inter alia, strengthening

Note: Format of original document retained.

the secretariat support services to these organs by all United Nations organizations and bodies involved in the water resources sector and, if required, through the convening of special or subject-oriented sessions,

(c) That the proposals for interagency co-ordination presented to the Conference in the report of the Administrative Committee on Co-ordination and the Environment Co-ordination Board be examined by the Committee on Natural Resources at its fifth session with a view to submitting its recommendations to the Economic and Social Council at its sixty-third session for consideration and implementation,

(d) That the regional commissions should, taking into account the central role of the Economic and Social Council and the Committee on Natural Resources at the global level, and the special needs and conditions of the respective regions:

- (i) Assist the United Nations Development Programme and the United Nations specialized agencies and organizations, at the request of the Governments of developing countries concerned, in identifying intersectoral subregional, regional and interregional projects and preparing programmes;
- (ii) Intensify their efforts in the water sector, and, with the assistance of the competent organizations of the United Nations system and at the request of the Governments concerned, enlarge co-operation among the countries in the water field at the subregional, regional and interregional levels;
- (iii) Assign specific responsibility on water to an existing inter-governmental committee within the regional commissions, or if necessary, create a new one, and establish or strengthen, as appropriate, the secretariat units of the commissions dealing with water, which would serve as the secretariat of the intergovernmental committee referred to in this subparagraph;
- (iv) Establish ad hoc groups of experts, as and when necessary, who should preferably be drawn from the countries of the region concerned:

(e) That, for the purposes outlined in the preceding paragraphs, the General Assembly should consider providing, as necessary, additional resources to the regional commissions and other relevant sectors of the United Nations within the budget of the United Nations,

(f) That at the country level, under the leadership of the United Nations Development Programme resident representatives, the United Nations system should intensify the co-ordination of projects and programmes undertaken at the request of the Governments of developing countries.

Annex III

RESOLUTIONS 2115 and 2121
BY THE ECONOMIC AND SOCIAL COUNCIL
UNITED NATIONS

August 1977

IX - Resolution adopted by the economic and social council*The Economic and Social Council

Bearing in mind resolution VIII of the United Nations Water Conference, 1/

Recognizing the imperative need for accelerated progress in the investigation and development of water resources, and the difficulties in the area of co-ordination which affect United Nations bodies in the execution of their tasks relative to water resources,

Further recognizing the central role which the Committee on Natural Resources and the regional commissions within their respective regions should play in the promotion of intergovernmental co-operation in the follow-up to the Mar del Plata Action Plan 2/ on integrated water resources development and management, as recommended by the United Nations Water Conference,

1. Calls upon the regional commissions to convene regional meetings to obtain the views of States Members of the United Nations on the follow-up to the United Nations Water Conference, and the opportunities, needs and problems with respect to carrying out the recommendations of the Conference at the regional level;

2. Calls upon the Administrative Committee on Co-ordination and the Environment Co-ordination Board to develop in greater detail the administrative and financial aspects of the proposals contained in their report on present and future activities of the United Nations system in water resources development; 3/

1/ See Report of the United Nations Water Conference. Mar del Plata, 14-25 March 1977 (United Nations Publication, Sales No. E. 77. II. A. 12), P. 78.

2/ Ibid., Chap. I

3/ E/COME.70/CBP/4 and Add. 1 and 2.

Note: Format of original document has been retained.

* On the report of the Economic Committee (E/6045) 2115 (LXIII). Follow-up to the Mar del Plata Action Plan on an integrated water resources development and management adopted by the United Nations Water Conference.

3. Decides to convene a special session of the Committee on Natural Resources, in order to decide on further steps to secure the implementation of the Mar del Plata Action Plan on integrated water resources development; this special session, to be convened after the conclusion of the regional meetings referred to in paragraph 1 above, should be of no more than eight working days' duration and should take into account the observations of the regional meetings and the report to be prepared as requested in paragraph (2) above;

4. Calls upon the Committee on Natural Resources to provide for continued intergovernmental review and oversight of the follow-up to the United Nations Water Conference by the international organizations concerned in the field of water.

2085th Plenary meeting
4 August 1977

X -- Resolution adopted by the Economic and Social Council*

The Economic and Social Council

Recalling General Assembly resolution 3513 (XXX) of 15 December 1975 and Council resolution 1979 (LIX) of 31 July 1975,

Recalling further General Assembly resolutions 3201 (S-VI) and 3202 (S-VI) of 1 May 1974, containing the Declaration and the Programme of Action on the Establishment of a New International Economic Order, 3281 (XXIX) of 12 December 1974, containing the Charter of Economic Rights and Duties of States, and 3362 (S-VII) of 16 September 1975 on development and international economic co-operation,

Noting that the United Nations Water Conference held at Mar del Plata, Argentina, from 14 to 25 March 1977 took far-reaching decisions on the entire spectrum of the management and development of water resources, covering such aspects as the assessment of water resources, use and efficiency in different aspects, environment, health and pollution control, planning, management and institutional aspects, water legislation, education, training and research, and regional and international co-operation,

* on the report of the Economic Committee (E/6043)
2121 (LXIII). Report of the United Nations Water Conference.

Considering that the decisions reached at the Conference call for URGENT ACTION AND TAKING INTO ACCOUNT THE PROVISIONS OF Council resolution 2115 (LXIII),

1. Approves the report of the United Nations Water Conference 1/ containing the Mar del Plata Action Plan 2/ and the other decisions reached at the Conference;
2. Expresses its gratitude to the Government and people of Argentina for making possible the holding of the Conference and for their generous hospitality;
3. Expresses its appreciation to the Secretary-General of the Conference for the efficient preparation and organization of Conference;
4. Urges Member States and all organizations of the United Nations System to take intensified and sustained action for the implementation of the decisions reached at the Conference;
5. Recommends to the General Assembly that it should approve the Mar del Plata Action Plan of the Conference and the other decisions reached at the Conference, and to give due priority to the measures needed to implement them;
6. Recommends that Governments should consider, where necessary, the desirability of designating national water committees or other suitable organizations to co-ordinate and monitor the implementation of the Conference's recommendations at the national level on the basis of detailed national action programmes, encompassing areas specified in the note by the Secretary-General on the recommendations of the United Nations Water Conference and follow-up action, 3/ and recommends more popular involvement in the process of planning and decision-making towards the formulation of a national policy;

1/ Report of the United Nations Water Conference, Mar del Plata, 14-25 March 1977 (United Nations publication, Sales No. E.77.II.A.12).

2/ Ibid, chap. I.

3/ E/6015

Note: Format of original document retained.

7. Invites the Committee on Natural Resources at its special session convened in accordance with Council resolution 2115 (LXIII) to review plans and programmes prepared at the national and regional levels and to decide on any further steps necessary to secure the implementation of the Mar del Plata Action Plan;

8. Approves the subject suggested by the Secretary-General in section III of the note referred to in paragraph 6 above for discussion in regional meetings and at the special session of the Committee on Natural Resources;

9. Requests the Secretary-General:

(a) To formulate, in accordance with the decisions reached at the United Nations Water Conference, proposals in respect of steps required (i) to enable the Council, the Committee on Natural Resources and the regional commissions to play the central role in the promotion of intergovernmental co-operation, and (ii) to intensify the co-ordination of activities of the United Nations system at the country level under the leadership of the resident representatives of the United Nations Development Programme,

(b) To make the necessary arrangements for an in-depth study of the implications of Conference resolution II on community water supply, 4/ and the launching of the International Drinking Water Supply and Sanitation Decade recommended in paragraph 15 of the Mar del Plata Action Plan, 5/

(c) To arrange for the preparation of an in-depth study, in co-operation with the appropriate organizations of the United Nations system and in consultation with Governments, of the most effective and flexible mechanism for increasing the flow of financial resources specifically for water development and management, covering the elements outlined in the note by the Secretary-General referred to in paragraph 6 above,

4/ Report of the United Nations Water Conference, Mar del Plata, 14-25 March 1977 (United Nations publication, Sales No. E.77.II.L.12), Chap. I p. 66

5/ Ibid., p.14

(d) To present the result of the special studies called for in subparagraphs (b) and (c) above to the Committee on Natural Resources at its special session,

(e) To make appropriate arrangements for organizing meetings of representatives of existing international river commissions, with a view to developing a dialogue between the different organizations on potential ways of promoting the exchange of their experience,

10. Requests the regional commissions to strengthen and intensify their responsibilities in the water sector and, to this end, to assign specific responsibilities to an existing intergovernmental committee within the regional commissions, or if necessary created a new one in accordance with the recommendations of the Conference and with resolution I (V) of the Committee on Natural Resources, 6/ and to formulate their requirement for whatever additional resources may be necessary for this purpose;

11. Further requests the Secretary-General:

(a) To make the necessary arrangements for the co-ordinated preparation and servicing of the special session of the Committee on Natural Resources, which will deal with a wide spectrum of water-related activities and complex studies, and to urge the organizations and agencies of the United Nations system concerned with water resources development to participate effectively and substantively in the preparation process;

(b) To transmit the relevant decisions of the United Nations Water Conference to the secretariat of the United Nations Conference on Science and Technology for Development for further action to ensure that water management problems and the problems of appropriate technologies to given priority attention in the preliminary national and regional analysis undertaken in the preparation process for the United Nations Conference on Science and Technology for Development, as well as by that Conference itself;

6/ Official Records of the Economic and Social Council, Sixty-third Session, Supplement No. 2A (E/6004), p.6.

(c) To transmit the relevant recommendations and resolutions of the United Nations Water Conference to the United Nations Conference on Technical Co-operation among Developing Countries and to the competent organizations dealing with the preparatory process for that Conference, with a view to future action and specific objectives in this area being defined,

12. Recommends that the Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States, of the United Nations Environment Programme, should expedite its work on draft principles of conduct in the field of the environment, for the guidance of States in the conservation and harmonious exploitation of natural resources shared by two or more States;

13. Draws the attention of the International Law Commission, with reference to Council resolution 1955 (LIX) of 25 July 1975, to the recommendation of the United Nations Water Conference requesting the International Law Commission to give a higher priority in its work programme to the codification of the law of the non-navigational uses of international watercourses and to co-ordinate its work with activities of other international bodies dealing with the development of the international law of waters, with a view to the early conclusion of an international convention; 7/

14. Requests the Secretary-General to report to the General Assembly at its thirty-third session, through the Economic and Social Council, on the result of the special session of the committee on Natural Resources.

2085th Plenary meeting
4 August 1977

7/ Report of the United Nations Water Conference, Mar del Plata, 14-25 March 1977 (United Nations publication, Sales No.E.77.II.A12) Chap. I, para. 93 (a), p. 53.

Annex IV

RESOLUTION 39
BY THE ECONOMIC COMMISSION FOR WESTERN ASIA

April 1977

39(IV). Regional Co-operation in the Field of Water Resources Development

The Economic Commission for Western Asia

Recognizing the important role of water in the overall socio-economic development in the region,

Realizing the imperative need for accelerated progress in the investigation and development of water resources and its integrated management for the efficient use,

Aware of the urgent need for collaboration and co-ordination of activities in the field of water resources development and management for the benefit of all member countries,

Taking note with appreciation of the action proposals contained in the Report on the Regional Preparatory Meeting for the United Nations Water Conference held in Baghdad, Iraq, with emphasis on regional co-operation and institutions,

Taking further note of the recommendations and resolutions of the United Nations Water Conference held in Mar del Plata, Argentina,

1. Takes note of the Report of the Regional Preparatory Meeting of the United Nations Water Conference Doc. E/ECWA/42/Rev.1;
2. Urges that all action proposals of this meeting be taken into consideration particularly on the national and regional levels, by all Member States;
3. Requests the Executive Secretary of ECWA to take the initiative in contacting all member states in order to ascertain which of them ~~may~~ wish to establish a Water Resources Council and to convene its first meeting as soon as possible;
4. Calls upon the secretariat of ECWA to serve as the secretariat of the Council and at the expense of the member countries of the Council, in the event of its establishment;
5. Further requests the Executive Secretary to report to the fifth session of the Commission on the implementation of this resolution.

8th Meeting

28 April 1977

Note: Format of original document retained.

RESOLUTION ADOPTED BY ECWA
SECOND REGIONAL WATER MEETING, HELD
AT RIYADH BETWEEN 30 DECEMBER 1978 - 3 JANUARY 1979

ESTABLISHMENT OF A REGIONAL WATER RESOURCES COUNCIL

The ECWA Second Regional Water Meeting;

Recalling the recommendation to establish a Regional Water Resources Council adopted at its First Regional Meeting^{1/},

Considering the resolutions and recommendations of the United Nations Water Conference, which constitute the Mar del Plata Action Plan^{2/},

Noting that the Conference requested the regional commissions to "play a central role in the promotion of intergovernmental co-operation" in their respective regions, as a follow-up to the Plan, and specifically recommended in resolution VIII thereof that they should, inter alia, "assign specific responsibility on water to an existing intergovernmental committee within the regional commission, or, if necessary, create a new one and establish or strengthen, as appropriate, the secretariat units of the commissions dealing with water, which would serve as the secretariat of the intergovernmental committee referred to in this subparagraph",

Bearing in mind that the General Assembly, in its Resolution 32/197, on the restructuring of the economic and social sectors of the United Nations system, recommended that "the regional commissions should exercise team leadership and responsibility for co-ordination and co-operation at the regional level",

Recalling resolution 39 (IV) of ECWA concerning regional co-operation in the field of water resources development,

Convinced that it is desirable to make maximum use of the existing regional and subregional intergovernmental machinery and the available resources, in order to avoid the dispersal of effort and the proliferation of agencies, as well as to ensure economy of resources and efficiency in the action to be carried out,

^{1/} E/ECWA/NR/CONF.3/2

^{2/} E/CONF.70/29

Concerned, at the same time, that the terms of reference of the proposed Water Resources Council may imply certain unnecessary duplication of effort with existing regional and subregional organizations dealing with water resources development and management,

1. Decides that an ad hoc Intergovernmental Committee from among representatives of countries present at this Meeting be created, with ECWA working as its secretariat for the purpose of studying the possibility of establishing a Regional Water Resources Council, if the Committee should through its work find that such a council would not duplicate the activities of existing organizations in the region in this field;

2. Further decides that the Committee shall be composed of representatives from five countries, namely, Jordan, Lebanon Saudi Arabia, Syria and the United Arab Emirates, and shall carry out the above recommendations and prepare a report which shall be presented to a special meeting to be convened within a maximum of one year, to which all member states of ECWA shall be invited;

3. Requests the Executive Secretary of ECWA to provide the necessary secretariat support services to the Committee within its available resources.

Annex VI

CIR-12 REGARDING ADHOC INTERGOVERNMENTAL COMMITTEE MEETING
SCHEDULED 14-15 MARCH 1979 IN DAMASCUS TO STUDY POSSIBILITY
OF ESTABLISHING REGIONAL WATER COUNCIL STOP AS MOST OF THE
RELEVANT INFORMATION ABOUT EXISTING ARAB AND INTERNATIONAL
ORGANIZATIONS WERE NOT RECEIVED FROM CONCERNED OFFICIALS COMMA
THE MEETING IS POSTPONED UNTIL A DATE TO BE DECIDED ON
BASIS OF INFORMATION RECEIVED STOP WILL KEEP YOU INFORMED
STOP REGARDS

Annex VII

CIR-10 REOURLET 17 JANUARY 1979 REGARDING RESOLUTION ADOPTED
AT SECOND REGIONAL WATER MEETING CONCERNING POSSIBILITY OF
ESTABLISHING A REGIONAL WATER COUNCIL STOP ECWA STILL WAITING
YOUR RESPONSE AND APPRECIATE SENDING SOONEST INFORMATION AND
DOCUMENTS REQUESTED EARLIER STOP REGARDS

Natural Resources Programme
General Outline of the Study

Chapter 1: Land Resources

- 1 - 1 Area
- 1 - 2 Cultivable area
- 1 - 3 Cultivated area
- 1 - 4 Crop area
- 1 - 5 Pasture area
- 1 - 6 Forest area
- 1 - 7 Area unfit for agricultural utilization.

Chapter 2: Rain-fed Land

- 2 - 1 Climate
 - 2/1/1 Rainfall average and distribution in the different countries.
 - 2/1/2 Evaporation average and distribution in the different countries.
- 2 - 2 Relation between productivity and rainfall
- 2 - 3 Fallow
- 2 - 4 Use of lands with different rainfall averages
- 2 - 5 Intensification of agriculture in rain-fed land.

Chapter 3: Irrigated Land

- 3 - 1 Current area in each country
- 3 - 2 Current productivity
- 3 - 3 Product composition
- 3 - 4 Problems of irrigated agriculture (salinity, drainage, fertility)
- 3 - 5 Probable area

Chapter 4: Water Resources

- 4 - 1 Surface resources
 - 4/1/1 Available resources in each country
 - 4/1/2 Probable resources in each country
 - 4/1/3 Water lossess and possible means of utilization
 - 4/1/4
 - 4/1/5 Development of current irrigation practices
 - 4/1/6 Water basins

- 4 - 2 Underground resources
 - 4/2/1 Available resources in the Arab countries: quantity and quality.
 - 4/2/2 Probable resources: quantity and quality
 - 4/2/3 Difficulties in determination and utilization of resources
 - 4/2/4 Joint Arab action

- 4 - 3 Other water resources (sewage water, desalinated sea water, drainage water).
 - 4/3/1 Quantity
 - 4/3/2 Quality

Chapter 5: Production Factors

- 5 - 1 Increasing the productivity of irrigated land in each country.
 - 5/1/1 Rationalization of irrigation
 - 5/1/2 Fertilization
 - 5/1/3 Drainage
 - 5/1/4 Improvement
 - 5/1/5 Programme costs
 - 5/1/6 Programme returns
 - 5/1/7 Programme priorities

- 5 - 2 Increasing the productivity of rain-fed land
 - 5/2/1 Soil conservation programmes
 - 5/2/2 Water conservation programmes
 - 5/2/3 Services (classification - fertilization - mechanical ploughing - mechanisation)
 - 5/2/4 Programme costs
 - 5/2/5 Programme returns
 - 5/2/6 Programme priorities

Chapter 6: Development and Rationalization

- 6 - 1 Development and rationalization of water resources
- 6 - 2 Development of surface resources (rivers, wadies)
- 6 - 3 Development of subsurface resources in the different countries
- 6 - 4 Inter-Arab co-operation studies of water resources
- 6 - 5 Rationalization
- 6 - 6 Conveyance
- 6 - 7 Distribution
- 6 - 8 Water use on the farm
- 6 - 9 Programme costs
- 6 -10 Programme returns
- 6 -11 Programme priorities.

Investment Projects and Related Feasibility Studies

HAMAD BASIN DEVELOPMENT

Countries Involved: Iraq, Jordan, Saudi Arabia and Syria

Project objectives: the project aims at drawing up and ultimately implementing a programme for the integrated development of the Basin in conformity with the objectives of socio-economic development of the countries concerned.

Background: the exploration and subsequent exploitation of water resources in arid zones, the improvement of pastures and livestock development are becoming more and more emphasized in the development plans of most Arab countries. This is linked with the food security concept that is being formulated in the region.

This project was identified by the core team in the process of an inhouse review of the water resources development in the region. The field was requested to, and it did, obtain documentation on the project from the Arab Centre for the Studies on Arid Zones and Dry Lands (ACSAD) in Damascus.

Project description: the preparatory phase of the project consists of a thorough review of all existing information on the Basin available to both ACSAD and the concerned countries with a view to defining a set of reasonable objectives, preparing an outline of the programme of surveys and pre-investment work and agreeing with ACSAD on the components that will be considered for finance by the Regional Programme. As such the "project" is in the process of being formulated:

The proposed surveys should begin by stocktaking, analysis and evaluation of all existing pertinent information (population, livestock, soils, rains, underground water, vegetative cover etc...) to serve as a basis for the rational and purposeful planning of subsequent surveys.

Status of preparation: a preliminary project plan as well as brief papers on the geology and geophysical features of the Basin were prepared by ACSAD.

In addition to the above, some preliminary surveys on ~~the~~ component sectors of the Basin were undertaken by the individual countries as part of their national plans and surveys programmes.

Major project issues and problems: the main issue to be handled in respect to this project is to ensure that there is a reasonably clear development concept related to a set of explicit objectives fully understood and adopted by the governments concerned. Resource surveys to be undertaken in the region should be planned in conformity with that concept.

ARAB FUND FOR ECONOMIC AND SOCIAL DEVELOPMENT
FINANCIAL INVOLVEMENT IN WATER SUPPLY AND SEWERAGE
IN ARAB COUNTRIES OF THE ECWA REGION

PROJECT

| Country | Title | Objective | Description | Estimate Costs (Kuwaiti Dinars) million | | Amount of loan or grant | |
|---------|---------------------------|---|--|---|---------------|-------------------------------|---|
| | | | | Local | Foreign Total | | |
| Egypt | Postat Water Supply | To help reduce the impact of the acute water shortage in the Greater Cairo region by supplying water to southern and eastern Cairo from a water treatment plant to be executed by the Nile at Postat. | - Construction of a water pumping and treatment plant at a capacity of 600,000 cubic meters per day. - Engineering and consultancy services for the design and supervision of construction of above works. - Technical assistance for the training of engineering, management and operations personnel. | 13.9 | 9.7 | 23.6 | K.D. 9.7 million loan to finance 100% of the foreign exchange require- ments. |
| Egypt | Helwan Sewerage | To import and expand the sewerage system of Helwan township so that the new system accommodates Helwan's requirements up to the year 2010. | - Installation of a sewer network and main collector together with a treatment plant. - Engineering consultancy services for the design and supervision of construction. - Technical assistance for the training of engineering, management and operations personnel. | 10.1 | 8.3 | 18.4 | 8.3 million to finance 100% of the foreign exchange require- ments. |

PROJECT

| Country | Title | Objective | Description | Estimate Costs (Kuwaiti Dinars) | | Amount of loan or grant |
|---------|--|---|---|------------------------------------|-------|--|
| | | | | million | Total | |
| Egypt | Greater Cairo Water and Sewerage development study | To develop a master plan for the needs of Greater Cairo until year 2000 in both water supply and sewerage disposal. | Technical assistance on grant/loan basis. | | | A grant of KD 300,000 plus a loan of 300,000 i.e. a total of about US\$2.0 mill. |
| Jordan | Aqaba water supply (under active consideration appraisal complete) | To meet the exist-in and projected needs of the Aqaba area for water and to upgrade the ability of the water supply ASSOC to plan, design, operate and maintain its works and projects. | - Supply of pipes and valves, borehole construction, supply and erection of pumps and generating equipment, construction of the civil works for the main trunk and the water distribution system Aqaba. | 1.3 | 12.3 | 13.6 |
| | | | | | | KD 5.0 million loan (The Saudi Fund and the ODM are participating in financing the rest of the foreign exchange requirements.) |
| Syria | Damascus water supply | To secure adequate water supply for Damascus to meet its needs up to 1995. | - Construction of underground dam, a 15 km funnel, storage reservoirs and pumping station. - Training of technical and administrative personnel of the Fijeh water Authority. | 13.7 | 27.2 | 40.9 |
| | | | | | | KD 12million loan (IBRD) US AID are participating in financing the project. |

PROJECT

| Country | Title | Objective | Description | Estimates Cost. (Kuwaiti Dinars) million | Amount of loan or grant |
|---------------------------|---|--|--|--|--|
| | | | | Local Foreign Total | |
| Yemen Arab Republic | Hodeida Water Supply and Sewerage | <ul style="list-style-type: none"> - To provide safe supply of water through house connections to 75% of the 1995 population and through public stand pipes to the rest. - To provide for the collection and treatment of sewerage for those connected to the water supply system. | <ul style="list-style-type: none"> - The water supply component consists of rehabilitating the existing well pumps, booster stations and connection of the new wells to the original mains. - The sewerage component entails building a sewerage collection system to be connected to existing houses. | <ul style="list-style-type: none"> - KD 10.4 million for the water supply. - KD 7.6 million for the sewerage | <ul style="list-style-type: none"> - KD 6 million loan, for the sewerage component IDA is financing the water supply. |
| Yemen Arab Republic | Sanaa Water Supply | <ul style="list-style-type: none"> - To meet the needs of Sanaa until 1987 and provide direct water connexions to 75% of the projected 1982 population. The remainder of the population is to get water through public taps. | <ul style="list-style-type: none"> - Construction of well field. - Head works pumps and reservoirs. - Distribution system. - Engineering services. | 2.4 3 4 5.8 | <ul style="list-style-type: none"> - KD 3.4 million loan. |

AFESD/UNDP Joint Programme for the Identification and
Preparation of Inter-Country Investment Projects

PROJECT SHEET

Name of project: Study of the Requirements for Regionalizing the Teaching Function of the Wad el Magboul Institute in Sudan.

Sector: Development of Institutions dealing with Manpower, Scientific Research and Training.

Sub-sector: Training (Professional formation).

Beneficiary (ies): Sudan, YAR, PDRY, Somalia, Mauritania.

Organization (s) concerned: Wad el Magboul Rural Water Technician Institute, Khartoum, Sudan.

Description: This project aims at matching the skills needed by the Arab Least Developed Countries to effectively exploit their groundwater resources with the training offered by the Wad el Magboul Rural Water Technician Institute in Sudan, under a formula that would guarantee a regional character to the Institute's teaching function. In this regard, the Joint Programme has acted as a catalyst in bringing together a request from the Sudanese government for technical assistance to the Institute and an offer of the French government of 400,000 French Francs for assistance of expertise in fostering regional training in the area of water development. The study will undertake to estimate the requirements of the ALDCs for drillers, surveyors and draftsmen - the skills now offered by the Institute. It will examine the current national supplies of these skills and will explore the factors affecting the number of trainees and their effective utilization upon completion of their training. The study will recommend methods for enlarging the scope of the Institute's training to enable it to address the requirements of the ALDCs while maintaining its national character.

Estimated cost of follow-up: -----

Total cost of study: Within the F. F. 400,000 (KD 25,000) grant of the French government.

Execution period: The study is expected to take 54 working days beginning within the second quarter of 1979.

Current status and next step: The terms of reference for the study were prepared by the Joint Programme, based on an earlier draft which was reviewed by the World Health Organization in Geneva and Alexandria. The Sudanese government has approved the terms of reference. The Joint Programme duly conveyed the Sudanese approval to the French authorities.

Organizations contacted: WHO, Alexandria, Geneva, Rural Water Corporation, Sudan, Caisse Centrale, Paris.

Project Officer: Flora Alyassini

Prepared: May 1979.

In the Name of God the Compassionate, the Merciful

The Objectives of the Secretariat of the Conference of Arab
Ministers of Agriculture for the Gulf and the Arabian Peninsula
on Water Resources

The Secretariat is attempting to realize the following objectives on water resources:

1. Offering studies and proposals for centralizing water affairs at the national level so as to bring together all activities related to water resources, storage and use.
2. Preparing national short and long term water plans covering the following:
 - (a) The formulation of a general water policy and an attendant strategy: the establishment of a system for the conservation of water sources and the control of water use;
 - (b) The preparation of a comprehensive study for the assessment of water resources and their different uses;
 - (c) The compilation of a comprehensive atlas of national water resources;
3. Limiting water wastage in agriculture due to losses in transport and in defective irrigation networks, through the employment of modern methods of water collection and storage and improvement of production and productivity, with the emphasis on the following activities:
 - (a) Surveying the water requirements of agriculture and improving irrigation networks with the introduction of modern methods;
 - (b) Utilizing groundwater for irrigation in application of the collective exploitation approach based on common irrigation networks, so as to limit the haphazard use of water and to organize its rational economic use;
 - (c) Accelerating research programmes on the relationship between land and water use and water rationing for different produce;
 - (d) The provision of advanced water equipment;

(e) The maximization of the use of desalinated sea water, thus reserving other water resources for agriculture;

(f) The treatment and recycling of drain and sewage water;

(g) The construction of dams and other installations for the conservation of the waters of rain torrential streams for extending their use for as long a time as possible and for assuring their availability when needed;

(h) The formulation of legislation for controlling water use and for enhancing its economic effectiveness.

4. Providing hydrological information through the establishment of a programme for covering each country with a network of hydrometeorological stations, gathering this information and analysing it on a continuous basis.

5. Exchanging information and technical co-operation among the States members of the Secretariat - especially the states with common borders - so as to promote the development and should management of common water resources.

6. Considering the establishment of special, permanent training centres at colleges and institutes or national water development bodies and the organization of manpower training programmes.

Annex XII

THE LEAGUE OF ARAB STATES
THE ARAB CENTRE FOR THE STUDY
OF ARID ZONES AND DRY LANDS

Projects of the
Department of Water Studies

Damascus
1978

I. Arab Water Resource Map Project

I.1 Site: All Arab countries

I.2 Commencement date: End of 1975

I.3 Objectives:

(a) Preparation of a map identifying the surface - and ground - water resources of the Arab world and their major chemical and hydrological characteristics,

(b) Determining the extent to which water-bearing strata constitute natural units and studying such units in an integrated manner,

(c) Studying the hydrological relationships among different water resources on a broad regional level,

(d) Standardizing the concepts and symbols used to represent water locations and hydrological, hydrogeological and hydrochemical conditions prevailing in the Arab countries,

(e) Establishment of an Arab hydrological and hydrogeological data bank in the service of water studies at the regional and the national levels.

I.4 Collaborating parties

National departments and institutions responsible for the study of water resources in the Arab world, UNESCO and the International Association of Hydrologists (IAH).

I.5 Work completed

The first stage of the project was completed in two years. It involved preliminary discussion and consultation with specialists and officials of water study departments in the Arab countries. The work was carried out by the director of the Department of Water Studies. This stage also involved the standardization of the concepts, symbols and methodologies that were to be used in the second (and last) stage, after discussion with specialists in the Arab countries.

Among the more significant activities of the first stage was the preparation of draft plates for discussion and presentation before the General Commission for the Arab Water Resources Map. The following plates were prepared:

(a) A plate to the scale of 1:500,000 covering Syria and Lebanon and parts of Iraq, Saudi Arabia and Jordan (Plate C - 1),

(b) A plate to the scale of 1:000,000 covering the same region as plate C - 1 above,

(c) A plate to the scale of 1:150,000 covering parts of Lebanon and Syria. This plate is a continuation of the Hydrological Map of Europe.

These plates proved the following major information:

- (a) Dams and their respective storage capacities,
- (b) Hydrometereological stations,
- (c) Foggarat and springs (with flows in excess of 10 liters/second) and wells,
- (d) Irrigation canals and drinking water projects,
- (e) Groundwater levels, boundaries of catchment areas, and directions of groundwater flow.

I.6 Plan of action for 1978.

The 1978 plan of action involves preparation of the explanatory legends for the draft plates, colour printing the plates and drafting annexes showing the quality and gydrochemical characteristics of water resources.

The plan of action also includes presenting to the General Commission for the Arab Water Resources Map at its meeting of 18-23 November 1978 the accomplishments of the first stage (with the draft plates) for discussion and for obtaining recommendations concerning the broad lines of the plan of action for the second stage of the project. UNESCO and IAH will be invited to participate at this meeting.

II. The Hammad Basin Project

II.1 Site: Rural region common to Syria, Jordan, Saudi Arabia and Iraq.

II.2 Commencement date: End of 1974

II.3 Objectives:

II.3.1 Long-term objective

Improving and increasing animal production on the natural pastures of the basin, thereby improving the living conditions of the population of this Arab region.

II.3.2 Immediate objectives

(a) Studying meteorological conditions, particularly rainfall and its effects on natural pastures,

(b) Identifying available surface-water resources and studying their qualitative and quantitative characteristics and the possibility of exploiting surface torrents,

(c) Identifying water-bearing strata and their hydrological characteristics, calculating water balances and delimiting the areas that are amenable to exploitation and the methods for exploiting them,

(d) Surveying the soil for the purpose of improving natural pastures and studying the obstacles to development in this field,

(e) Surveying the basin's flora so as to identify families of perennial and annual vegetation for grazing with the emphasis on the need to improve and proliferate the vegetation that is suitable for grazing and to encourage livestock in desert grazing areas therewith,

(f) Studying the feasibility of using wind energy for local purposes, such as electric lighting in remote villages and pumping groundwater from wells,

(g) Studying thermal differentials in the different strata and identifying high temperature areas which can serve as the base for the future development of geothermal energy.

II.4 Collaborating parties

The project programme involves centralized activities to be carried out by the Arab Centre and country activities to be undertaken under the Arab Centre's supervision by the national department concerned in Jordan, Iraq, Syria and Saudi Arabia. Consultations are in progress to associate the Arab Fund for Economic and Social Development (AFESD) in the project.

II.5 Work completed

The work of the preparatory stage has been completed. This involved consultation with the relevant departments in the project countries and the collection of available data on the climatic, geological, hydrogeological, hydrochemical, soil and plant cover conditions of the different regions of the basin. A project committee was formed with the director of the Department of Water Studies as chairman and representatives of the project countries as members. The Arab Centre charged committees of specialists and Arab and international experts with the task of analyzing and evaluating the data.

The Department of Water Studies of the Arab Centre prepared a document on the Hammad Basin Project specifying the work to be implemented by the Arab Centre. This included a description of co-ordination functions and field studies as well as the details of country-level tasks and the project time-table and budget.

II.6 Plan of action for 1978

The 1978 plan of action provides for seeking the approval of Syria, Iraq, Jordan and Saudi Arabia for the project plan so that implementation can begin. Iraq, Saudi Arabia and Jordan have given their approval, while the Syrian Government has submitted a note to its higher authorities requesting approval of implementation.

This year's plan of action also calls for the appointment of a project director and national liaison officers, the formation of field groups and the procurement of equipment. It calls for a start in the equipment of pilot basins, the definition of the tasks of the geophysical teams and the drafting of topographic infrastructure maps.

III. The Do Basin Project

III.1 Site: Syrian Arab Republic

III.2 Commencement date: End of 1972

III.3 Objectives:

III.3.1 Long-term objectives

The integrated ~~exploitation~~ of available water resources in a model basin in a closed arid zone and the identification of the best scientific and technological methods for the study of water resources and for optimizing their integrated multi-purpose utilization.

III.3.2 Immediate objectives

(a) Study of the climate and its various elements and micrometeorological variations and the relationships between climate and the elements of the hydrological cycle (hydrometeorological studies),

(b) Study of the hydrology of surface water, especially the conditions of groundwater seepage in arid climatic environments and the system of surface flow,

(c) Hydrological studies in exploration of groundwater; study of the present status of groundwater in the upper and in the lower strata; and determining the hydraulic evidence of the different water-bearing strata and the hydraulic linkages among them.

(d) Geophysical studies to determine the thickness and extensiveness of groundwater strata along the Do Basin; utilizing these studies to determine the extend to which saline water is present in the water-bearing strata.

III.4 Collaborating bodies

The Department of Water Studies of the Arab Centre is responsible for implementing this project.

III.5 Work completed

All work and study on this project have been completed. This involved the establishment of hydrological and meteorological monitoring system - monitoring wells and stations on torrent streams. The completed work indicated in the project

plan involved surface hydrological, hydrochemical and hydrogeological activities. The isotopic and geophysical operations have also been completed. Computer analysis of the measurements and other data collected during the implementation stage has begun and several publications have been issued giving some of the project findings.

III.6 Plan of action for 1978

This plan of action involves the preparation of the final report, the compilation of an atlas of the Basin's natural resources, with emphasis on water resources, and the construction of a mathematical model for the adoption of final recommendations concerning investment plans and agricultural development schemes for the Basin.

IV. Project for the study and development of historical irrigation works and water technologies of the Arabs

IV.1 Site: Model installations in several Arab countries.

IV.2 Commencement date: 1/9/1978

IV.3 Objectives:

(a) Study, document and evaluate the historical irrigation works and water technologies of the Arabs (the foundations, types and distribution networks),

(b) Determine the efficiency and productivity of these works and the flow of groundwater to and from them and evaluate the economics of the technologies used,

(c) Study the best means for raising the efficiency of these water works and increasing their water flow,

(d) Develop and modernize the techniques used in operating and conserving these water works and technologies,

(e) Prepare proposals and plans for optimizing the exploitation of historical irrigation works and water technologies.

IV.4 Collaborating parties

The Department of Water Studies of the Arab Centre is responsible for implementing this project.

IV.5 Work completed

The Department visited several historical irrigation works in Syria, Oman, Yemen and Tunisia and gathered information thereon.

IV.6 Plan of action for 1978

The plan of action provides for preparations for the implementation stage in 1979. The Arab Centre is to continue to gather available information on historical irrigation works and new technologies in the Arab world for the purpose of classification into distinct economic and technological categories and the selection of a limited number of installations for detailed study.

Damascus 24/5/1978

(signed) Director of the Department of Water Studies

Dr. John Khoury

Annex XIII

THE LEAGUE OF ARAB STATES
ARAB CENTRE FOR THE STUDY OF
ARID ZONES AND DRY LANDS

Agreement on
The Establishment of the Arab Centre
(Part related to the Department of Water Studies)

Department of Water Studies

Component sections:

- Surface-water section
- Groundwater section
- Water quality section

I. Water studies (hydrological):

1. Surface water

- (a) Study of water system (hydrology) of surface water bodies (lakes, rivers, seasonal torrents and springs) and their hydrological characteristics,
- (b) Study of the establishment of networks for surface-water measurement and discharge stations and development of measuring techniques and equipment suitable for use in arid zones.
- (c) Study of the nature of the sediment load in surface-water streams.
- (d) Protecting surface-water reservoirs from sedimentation through the construction of cross-stream dikes for blocking the flow of sediment,
- (e) Study of the possibility of exploiting seasonal torrent streams through the construction of dams for the storage or diversion of groundwater,
- (f) Measuring evaporation from open reservoirs and the development ways to reduce evaporation rate therefrom and the seepage rate from canals and drains,
- (g) Determining run-off coefficients of streams for the maintenance of water works and conservation of soil.

³ Translator's note: Should the Arabic read: "refunds of surface-water discharge measurement stations?"

2. Groundwater

(a) Prospecting and exploring for groundwater and determining the extent of water-bearing strata by identifying existing water sources, conducting geological and geophysical surveys, drilling experimental wells, measuring well-water levels, and organizing monitoring well systems,

(b) Measuring the groundwater stored in the different strata by pumping tests; determining the hydraulic characteristics of water-bearing strata; drawing up contour maps of water level in the different strata and identifying feed-waters and the movement and direction of their flow,

(c) Studying interference between springs and wells caused by groundwater use and taking measures to preserve the hydraulic balance of the two sources,

(d) Calculating average annual recharge of water-bearing strata and determining water balance thereof,

(e) Studying the natural infiltration of rain, snow, and surface water into water-bearing strata and determining the rates of infiltration and the possibility of increasing the feed-water to these strata with artificial infiltration,

(f) Studying ways to control pumped water so as to limit the intrusion of saline water and the pollution of fresh water,

(g) Conducting technical studies of the possibility of applying the vertical drainage method of land reclamation.

3. Hydrological basins

(a) Identifying hydrological basins and calculating their water balances in the light of the findings of surface and groundwater statistics courses,

(b) Studying plans for the exploitation of the water potential of the basins through the construction of water works in an integrated and economic manner, commensurate with the water revenues of each basin,

(c) Application of mathematical models in hydrology to hydrological studies and the installations of the basins,

(d) Application of models in hydrology in the study and development of water basins,

(e) Preparing of hydrological atlas for the Arab world.

II. Hydrochemical studies

(a) Periodic analysis of ground and surface water to determine its quality and its suitability for domestic, agricultural and industrial use,

(b) Studying the geochemistry of groundwater to support and clarify the findings of water-strata studies through the use of radioactive isotopes in addition to conventional methods,

(c) Studying the possibility of exploiting mineral and thermal waters for a variety of purposes,

(d) Studying the sources of ground and surface water pollution and the methods of treatment,

(e) Studying ground, surface and sea water desalination techniques.

Third Special Session
COMMITTEE ON NATURAL RESOURCES
Agenda item 3H

E/C.7/L.76

REPORT OF THE ECONOMIC AND SOCIAL COUNCIL

Draft Resolution

Institutional Arrangements for International Co-operation at the
Regional Level in Implementation of the Mar del Plata Action Plan

The Economic and Social Council

Considering the resolutions and recommendations of the United Nations Water Conference which constitute the Mar del Plata Action Plan on integrated water resources development and management which has been endorsed by the General Assembly in resolution 32/158,

Recalling that in resolution VIII, "Institutional arrangements for international co-operation in the water sector", the United Nations Water Conference recommended that a "central role" be played by the Economic and Social Council, the Committee on Natural Resources and the regional commission in their respective regions in the promotion of intergovernmental co-ordination as a follow-up to the implementation of the Mar del Plata Action Plan,

Taking into account resolution 32/197 of the General Assembly which calls upon the regional commissions to exercise team leadership and responsibility for co-ordination and co-operation at the regional level,

Further recalling that the Economic and Social Council, in paragraph 10 of resolution 2121 (LXIII) requested "the regional commissions to strengthen and intensify their responsibilities in the water sector",

Also considering the proposals continued in the reports of the regional meetings held under the auspices of the regional commissions, particularly taking note of the steps taken in establishing intergovernmental machinery in each region with the aim of expediting implementation of the Mar del Plata Action Plan,

Recommends

(a) That an implementation of the Mar del Plata Action Plan, the Regional activities of specialised agencies of the United Nations system and other organizations related to water resources should continue to take into account local needs and requirements of the various countries and regions; as and when requested,

(b) For this purpose, the activities of these agencies undertaken on the basis of respective regional programme should be co-ordinated at the regional level through existing institutional mechanisms or those to be established for the purpose of strengthening their role in that area; as and when requested,

(c) Projects forming part of such implementation programmes be specific and concrete, taking due account of the characteristics of the region involved, and be presented for discussion through the mechanisms referred to in paragraph (b) above; as and when requested.

Urges the regional commissions, which have not already done so, to take the necessary steps to establish an appropriate intergovernmental mechanism as soon as possible,

Recommends that the secretariats of regional commissions be provided with adequate manpower and financial resources to enable them to discharge the expanded responsibilities assigned to them by the United Nations Water Conference in relation to execution of the Mar del Plata Action Plan, including servicing of their respective bodies dealing with water and, should these activities demand additional resources, consideration be given, inter alia, to redeployment of the existing resources,

Recommends in addition, that where additional resources are required for implementation of the Mar del Plata Action Plan at the regional level, the commissions actively explore funding from the UNDP regional resources to encourage TCDC activities,

Invites member Governments to provide substantive technical and logistic inputs to the work programme of the respective bodies dealing with water in the regional commissions.

Annex XV

Report of the Ad Hoc Intergovernmental Committee
Established in the ECWA Second Regional Water Meeting on
the Possibility of Establishing a Regional Water Resources Council

According to the resolution adopted by the Second Regional Water Meeting of ECWA, which was held during the period 30 December 1978 to 3 January 1979 in Riyadh, an ad hoc Intergovernmental Committee was to be "established from among representatives of some member countries to study the possibility of establishing a regional water resources council, if the committee should, through its work, find that such a council would not duplicate the activities of existing organizations in the region in this field". The resolution provided "that the committee shall be composed of representatives from five countries, namely: Jordan, Lebanon, Saudi Arabia, Syria and the United Arab Emirates, and shall prepare a report which shall be presented to a special meeting to be convened within a maximum of one year"; it also requested "the Executive Secretary of ECWA to provide the necessary secretariat support services to the Committee within its available resources".

The Committee held its first meeting in Riyadh, on 2 January 1979. The meeting was attended by Mr. Ahmed Dakhgan (Jordan), Mr. Bassam Adib Jaber (Lebanon), Mr. Ibrahim Sagaby (Saudi Arabia), Mr. Nouredine Al-Rifai (Syrian Arab Republic), Mr. Khalil M. Ataya (United Arab Emirates) and Mr. Khair El-Din Haseeb (ECWA). It discussed the procedures that would be followed by the Committee to accomplish the task it was entrusted with and decided to request ECWA to obtain relevant documents and information from the following organizations on the basis of which ECWA would prepare a report on the subject:

1. Secretariat of the Conference of Arab Ministers of Agriculture for the Gulf Countries & the Arabian Peninsula.
2. Arab Center for the Studies of Arid Zones & Dry Lands (ACSAD)
3. Arab Organization for Agricultural Development (AOAD).
4. Arab League Education, Cultural & Scientific Organization (ALECSO), in as far as its work programme covers activities dealing with the functions of the proposed Regional Water Resources Council.
5. United Nations Educational, Scientific & Cultural Organization (UNESCO), in respect of its International Hydrology Programme.

6. Food and Agriculture Organization (FAO), in respect of any programmes it has in the region which deal with one or more of the functions proposed for the Regional Water Council.
7. Arab Fund for Economic and Social Development (AFESD), in as far as its inter-country programme is concerned.
8. Other available information on any existing national training institute or center in the water field where there are facilities for training non-nationals of the country.

As a follow-up to the decision of the ad hoc Committee, ECWA, on 17 January 1979, wrote to the following regional organizations asking for all relevant information.

1. Arab Organization for Agricultural Development (AOAD), Khartoum, Sudan.
2. Arab League Educational, Cultural and Scientific Organization (ALECSO), Cairo, Egypt.
3. Arab Center for the Study of Arid Zones and Dry Lands (ACSAD), Damascus, Syria.
4. United Nations Educational, Scientific and Cultural Organization (UNESCO), Cairo, Egypt.
5. Food and Agriculture Organization (FAO), Cairo, Egypt.
6. Arab Fund for Economic and Social Development (AFESD), Kuwait.
7. Secretariat of the Conference of Arab Ministers of Agriculture for the Gulf Countries & the Arabian Peninsula, Riyadh, Saudi Arabia.
8. H.E. Mr. Abdul Rahman Al Sheikh, Minister of Agriculture and Water, Riyadh, Saudi Arabia.
9. The Directorate of Meteorology, World Meteorological Organization (WMO), Jeddah, Saudi Arabia.

By 27 March 1979, only UNESCO had responded, giving ECWA a summary of its International Hydrology Programme (IHP). On that day, ECWA sent another cable to the following organizations reminding them of previous correspondence and asking again for their replies:

1. Arab Organization for Agricultural Development (AOAD).
2. Arab League Educational, Cultural and Scientific Organization (ALECSO)
3. Arab Centre for the Study of Arid Zones and Dry Lands (ACSAD)
4. Food and Agriculture Organization (FAO)
5. Arab Fund for Economic and Social Development (AFESD)
6. Secretariat of the Conference of Arab Ministers of Agriculture for the Gulf Countries & the Arabian Peninsula.
7. Directorate of Meteorology, World Meteorological Organization (WMO)

The second meeting of the Committee was held on 17-18 September 1979 in Damascus. This meeting was attended by: Mr. Ahmed Kilani (Jordan), Mr. Bassam Adib Jaber (Lebanon), Mr. Ibrahim Sagaby (Saudi Arabia), Mr. Nouredine Rifai (Syrian Arab Republic), Mr. Khalil Ataya (United Arab Emirates), Mr. Khair El-Din Haseeb & Mr. Shafiq Yunis (ECWA).

The meeting discussed the report, E/ECWA/NR/CONF.3/Add.1, dated 6 July 1979, which was sent by ECWA to members of the Ad Hoc Intergovernmental Committee and which contained all the replies of the above-mentioned organizations. Their replies were as follows:

- 1) ECWA received from the Arab Organization for Agricultural Development only a study on the development of water resources in the Yemen Arab Republic. It was a specific study of the resources of Wadi Siham and the Sa'ada Basin rather than an outline of the activities of the Organization or a summary of its terms of reference. The Organization mentioned that it was conducting a similar study for Qatar.
- 2) ECWA received a letter from the Arab Fund for Economic and Social Development with the following enclosures:
 - a - Chart of the lending activities of the fund in the water/ sewerage sector.
 - b - A summary of the study of the Hamad Basin common to Jordan, Syria, Saudi Arabia and Iraq.

- c - c - Expansion of Wad el-Magboul Institute in Sudan.

From a brief outline, ECWA found that the Institute's activities were similar to those of one of the proposed subsidiary bodies of the proposed Water Resources Council, namely the manpower training body.

- 3) ECWA received from the Secretariat of the Conference of Arab Ministers of Agriculture for the Gulf Countries and the Arabian Peninsula a description of its goals & objectives in the field of water resources, which are as follows:
 - a - Submitting studies and proposals for centralizing water affairs at the national level.
 - b - Preparing national short and long-term plans.
 - c - Limiting water wastage in agriculture.
 - d - Providing hydrological information through the establishment of a programme for covering each country with a network of hydrometeorological stations, gathering this information and analyzing it on a continuous basis.
 - e - Exchanging information and technical co-operation among the member States of the secretariat so as to promote the development and sound management of common water resources.
 - f - Establishing a water data bank and using it to begin an inventory of water resources and to make a study of water demand.
 - g - Considering the establishment of special, permanent training centers for the development of water resources.
- 4) ECWA received from the Arab Centre for the Study of Arid Zones & Dry Lands the following:
 - 4.1 - Projects of the Department of Water Studies
 - 4.2 - Agreement on the establishment of the Arab Centre (the part related to the Department of Water Studies)
 - a - Surface water section
 - b - Groundwater section
 - c - Water quality section

ECWA pointed out in its report that it would continue its efforts to obtain new information up to the time the committee holds its second meeting in Damascus.

Following detailed discussion which lasted through several meetings at which all members of the Committee participated and in light of the information obtained from the above-mentioned ECWA report, the Committee concluded on the following notes:

- 1) ECWA expanded worthy effort in requesting information and documentation from existing organizations in the region dealing with water resources and succeeded in obtaining a portion thereof in summary form.
- 2) Resemblances in the activities of existing organizations in the water resources field sometimes reached the point of duplication.
- 3) The proposed responsibilities of the Council should be amended and limited to the tasks of co-ordinating and complementing the activities of existing regional organizations dealing with water resources in the region. Co-ordination consisted of the collection of information on the activities of existing organizations and their discussion at the periodic meetings of the Council.
- 4) The question whether the activities of the proposed council should be expanded to include responsibilities which are not undertaken by existing organizations should be postponed for later consideration.
- 5) ECWA should act as the permanent secretariat of the proposed Council.

This report was signed by:

- Mr. Ahmed Kilani (Jordan)
- Mr. Bassam Adib Jaber (Lebanon)
- Mr. Ibrahim Sagaby (Saudi Arabia)
- Mr. Nouredine Rifai (Syrian Arab Republic)
- Mr. Khalil Ataya (United Arab Emirates)